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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,140	02/20/2004	Robert W. Venderbosch	133113-2	7087

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GEAM - CYCOLOY  
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PITTSFIELD, MA 01201-3697

EXAMINER

BOYKIN, TERRESSA M

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<b>Application No.</b> 10/783,140	<b>Applicant(s)</b> VENDERBOSCH ET AL.	
	<b>Examiner</b> Terressa M. Boykin	<b>Art Unit</b> 1711	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 02 March 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

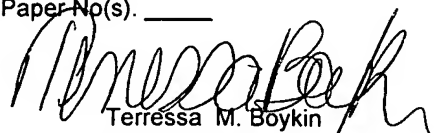
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: \_\_\_\_\_.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
 13. ☒ Other: see attachment hereto.

  
 Terressa M. Boykin  
 Primary Examiner  
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**Attachment to Advisory Action:*****Response to Arguments***

Applicant's arguments filed 3-2-6 have been fully considered but they are not persuasive. As noted previously since claims 1, 12 and 18 remain unclear as to the exact structure or structures therein applicants the arguments with regard to the prior art is not convincing. There exist a vast amount of references\* containing a copolycarbonate with an "embedded" polysiloxane moiety. It is not clear whether the parameters exist within the references without the claim being clearly set forth. In order to prosecute the case resourcefully and expediently while giving the applicants the best possible search, it is imperative and practical of the applicants to clarify how the "domain" and/or structure thereof is encompassed.

**\***

see as examples in various publications and patents. ("20050187372" or "20050165480" or "20050163998" or "20050067946" or "20050058688" or "20050058009" or "20050048493" or "20050043816" or "20050043585" or "20040241614" or "20040221942" or "20030147962" or "20030144388" or "20030003365" or "20020198301" or "20020102312" or "20020094481" or "20010043948" or "20010000470" or "20010000230" or "6969745" or "6967436" or "6890687" or "6846855" or "6805720" or "6720113" or "6689390" or "6660176" or "6508860" or "6444351" or "6423345" or "6376128" or "6120806" or "6117603" or "5919590" or "5902673" or "5585436" or "5407593" or "5223588" or "5110500" or "5003004" or "4254199" or "4225692" or "4161490" or "4153802" or "4056391" or "4050934" or "10251408" or "2004076541" or "20050187372" or "2004076541" or "864599") each include some form of a polycarbonate and matrix and containing a polysiloxane.

The previous Final action is repeated for your convenience.

**35 USC 112, Second Paragraph**

**Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

As noted above, while stated as a preference, in view of the structures as

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noted on pages 5 and 6, it is unclear as to what other particular structures the matrix encompasses and how that structure differs from other structures wherein polycarbonate is in mixture or blended/blocked with polysiloxane. For this reason, applicants must specify the domain structure or some form of the polycarbonate polysiloxane matrix. As noted previously the claims must be specified in accordance with the disclosure at pages 3-6. While stated as a preference, in view of the structures as noted on pages 5 and 6, there is no other disclosure of what other particular structures the matrix encompasses and how that structure differs from other structures wherein polycarbonate is in mixture or blended/blocked with polysiloxane.

### **Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claims 1- 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6676852 see abstract, col. 2 line 5 through col.5 line 62, examples and claims 1,3,4,5,10.***

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**US 6676852** discloses thermoplastic compositions comprising one or more thermoplastic resins and a phosphorescent compound with an aluminate matrix. The compositions of the invention are particularly suitable for injection molding processes.

The reference discloses thermoplastic compositions comprising a thermoplastic resin or a blend of thermoplastic resins, a graft copolymer comprising a rubbery graft base upon which one or more monomers have been grafted and a phosphorescent pigment with an aluminate matrix expressed by M-Al, in which M is at least one metal element selected from calcium, strontium and barium and Al represents an aluminate group such as  $\text{Al}_2\text{O}_3$ .

The thermoplastic resin is preferably a polycarbonate resin or a blend of a polycarbonate resin and or more thermoplastic resins. The concentrates of the reference comprise a thermoplastic resins and/or a graft copolymer comprising a rubbery graft base upon which one or more monomers have been grafted and a phosphorescent pigment (phosphor) with an aluminate matrix expressed by M-Al, in which M is at least one metal element selected from calcium, strontium and barium and Al represents an aluminate group such as  $\text{Al}_2\text{O}_3$ , in a quantity of at least 5% by weight, calculated with respect to the total quantity of the mentioned components.

The compositions of the reference comprise the following essential components: (a) 50-99% by weight of a thermoplastic resin or a blend of thermoplastic resins; (b) 1-50% by weight of a graft copolymer comprising a rubbery graft base upon which one or more monomers have been grafted, the quantities of (a) and (b) being calculated with respect to the sum of component (a) and (b) taken together; and (c) a phosphorescent pigment (phosphor) with an aluminate matrix expressed by M-Al, in which M is at least one metal element selected from calcium, strontium and barium and Al represents an aluminate group.

Suitable thermoplastic resins are for example polycarbonates, siloxane-polycarbonate block copolymers, polyesters, polyolefines, styrene polymers and styrene copolymers, PVC, polyamides, polyphenylene ethers, polyacetals, polyacrylates such as polymethylmethacrylates and blends thereof. Preferred are polycarbonates and blends comprising a polycarbonate. Blends with polycarbonate should comprise at least 60% by weight, preferably at least 70% by weight of polycarbonate based on the total amount of thermoplastic resins (a). In case of compositions comprising as component (a) or as a part of component (a) a polycarbonate, the content of the graft copolymer is preferably between 1 and 15, more preferably between 1 and 10% by weight with respect to the sum of (a) and (b). In case of blends the most preferred blends are those comprising polycarbonate and one or more of the following: a polyester, a siloxane-polycarbonate block copolymer or a SAN copolymer.

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Some of the hydroxyaryl-terminated polydiorganosiloxanes that may be used include phenol-siloxanes of the formula (VII).

The siloxane-polycarbonate block copolymers have a weight-average molecular weight ( $M_w$ , measured, for example, by ultra-centrifugation or light scattering) of greater than or equal to about 10,000, preferably greater than or equal to about 20,000. Also preferred is a weight average molecular weight of less than or equal to about 200,000, preferably less than or equal to about 100,000. It is generally desirable to have the polyorganosiloxane units contribute about 0.5 to about 80 wt % of the total weight of the siloxane-polycarbonate copolymer. The chain length of the siloxane blocks corresponds with about 10 to about 100 chemically bound organosiloxane units.

The thermoplastic composition comprising as component (a) a blend of a polycarbonate resin and one or more of the following thermoplastic resins: a thermoplastic polyester resin and a siloxane polycarbonate block copolymer can further be characterized by their favorable notched Izod impact strength according to ASTM D256. The notched Izod impact strength is at least 10 ft-lb/inch (at least 530 at J/m) at zero degrees Celsius, or even at -10 degrees, or more preferably at -30 degrees or at -40 degrees and most preferably at -50 degrees Celsius.

Examples disclosed in the reference include:

Two polycarbonate resin formulations were prepared with the following composition. Polycarbonate resin formulation 2E: 80 parts of poly(bisphenol-A carbonate) with a molecular weight (MW) of 29,900 20 parts of poly(bisphenol-A carbonate) with a molecular weight (MW) of 21,900 9.10 parts of polycarbonate-siloxane copolymer (20% siloxane content mostly D50) 0.11 parts of 2,4-di-tert-butylphenol phosphite 0.22 parts of antioxidant Seenox 412S 0.33 parts of antioxidant 1076 4.60 parts of MBS impact modifier (methacrylate-butadiene-styrene copolymer)

Polycarbonate resin formulation 2F: 80 parts of poly(bisphenol-A carbonate) with a molecular weight (MW) of 29,900 20 parts of poly(bisphenol-A carbonate) with a molecular weight (MW) of 21,900 9.10 parts of polycarbonate-siloxane copolymer (20% siloxane content mostly with a chain length of about 50 units) 0.11 parts of 2,4-di-tert-butylphenol phosphite 0.22 parts of antioxidant Seenox 412S 0.33 parts of antioxidant 1076 4.60 parts of MBS impact modifier (methacrylate-butadiene-styrene copolymer) 3.0 parts of Luminova G300FFS (UMC-Nemoto; median particle size below 2 microns) previously dried at 260.degree. C. for 4 hours.

Consequently, in view of the above rejections, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period; then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### **Correspondence**

**Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is ( **571-272-1700**).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

**Examiner Terressa Boykin**

**Primary Examiner**

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